JRIIE Journal of Research Innovation and Implications in Education
Center for Research Implications & Practice

Website:www.jriiejournal.com ISSN 2520-7504 (Online) Vol.9, Iss.2, 2025 (pp. 974 - 982)

Effect of Transport Management Practices on Organizational Performance in Rwanda: A Case of Dubai Ports World Rwanda

Myriam Izabayo & Nimpano Desire
University of Kigali
https://orcid.org/0009-0000-6303-0758
Email: izabayomyriam@gmail.com

Abstract: *The general objective of this study was to assess the effect of transport management practices on organizational performance in Rwanda. The researcher conducted both descriptive and correlational studies. Descriptive survey research uses surveys to collect information on a variety of issues and correlational studies research design examines the links that exist between variables under the study. Statistical Package for Social Sciences (SPSS) version 25 was used in the study. The unstandardized coefficient for Transport Scheduling was 0.429, indicating that for each one-unit increase in transport scheduling, organizational performance is expected to increase by 0.429, if all other variables remain constant. The significance level for this coefficient (Sig. = 0.000) illustrates that this relationship is highly statistically significant, indicating a strong effect of transport scheduling on organizational performance. For Transport Route Planning, the unstandardized coefficient is 0.335, which means that for every one-unit increase in transport route planning, organizational performance is expected to increase by 0.335, with all other factors held constant. The significance of this coefficient is also 0.000, denoting a highly statistically significant positive relationship with organizational performance. Finally, the unstandardized coefficient for Transport Tracking is 0.187. This indicates that an increase of one unit in transport tracking is associated with an increase of 0.187 in organizational performance, assuming all other variables are constant. The study recommended that Dubai Ports World Rwanda should conduct regular training sessions for staff to improve their logistics skills.*

Keywords: *Transport Management Practices, Organizational Performance, Transport Scheduling, Transport Route Planning, Transport Tracking*

How to cite this work (APA):

Izabayo, M. & Nimpano, D. (2025). Effect of transport management practices on organizational performance in Rwanda: A case of Dubai Ports World Rwanda. *Journal of Research Innovation and Implications in Education, 9*(2), 974 – 982. **https://doi.org/10.59765/ngir9.**

1. Introduction

Transport management practices aim at delivering the right product to the right place, at the right time, within the accepted cost. Transport management plays an important role in the efficient functioning of organizations across various industries (Koh *et al.*, 2020). In Rwanda, a country with a rapidly growing economy and evolving transport infrastructure, understanding the intricate relationship between transport management practices and organizational performance is crucial for sustained growth and competitiveness.

According to Nzeyimana (2021), transportation is the part of logistics that deals with the forward and/or reverse flow of materials either raw materials for production, equipment, work in progress or finished products. It is the activity of moving goods from the location of origin to the location where they are needed. Rwanda is a consumer economy; the capacity of production is very low in almost all domains and in

pharmaceutical sector the supply chain relies solemnly on importation. Logistics and transport systems are very critical to the success of the supply chain and more important in nonproduction system.

Despite logistics management practices in place, many logistics agencies, especially in developing countries, are still facing transport management challenges in that some products are delivered late and inadequate in quantity. Some products have even expired due to poor inventory management system and transportation system in place hence making them fail in meeting their goals and objectives (Kabale *et al.*, 2019). In Rwanda, issues affecting logistics management includes heavy rains and lengthy rainy seasons, long distance and hilly landscape roads as observed, especially in the Northern and the Western provinces, as well as soil erosion, rock falls, landslides and floods, which destroy heavy infrastructure, hence, sometimes makes it difficult for emergencies. In Rwandan health sector, blood safety affected in some instances when the mode of transport that do not meet required standards and which may impair the quality of blood is used (Nema *et al.*, 2023).

According to Dukuly (2023), Rwanda clearing and forwarding companies face a number of warehouse management challenges related to transport mismanagement and high logistics costs. For instance, Gorilla Logistics Limited is the regional market leader in the logistics industry in international parcel, express, air and ocean freight, road and rail transportation, contract logistics and international mail services to customers. It has integrated technology into systems to serve clients with utmost efficiency for customers to check shipment movements themselves in real-time. For instance, in the year 2020, Gorilla Logistics cleared 987 air freight, 549 ocean freight, 68 road freight and 174 cargoes by rail freight. In addition, Rwanda pay RWF 12 per kilogram shipping and shortage of consignment, but Gorilla has reduced the rate of RWF 8 per kilogram and payment is done 15 days from when the invoice is issued.

Othman *et al.* (2019) stated that congestion is majorly caused by delays in collection of goods and cargo by owners hampering logistics and transport operations. This problem, in addition to others, has continued to threaten the conduct of logistic operations of the company and its performance for a number of years.

There is limited empirical evidence specifically focusing on effect of transport management practices on organizational performance in Rwanda. This study aimed to bridge the gap by conducting a comprehensive analysis on the effect of transport management practices on organizational performance in Rwandan, focusing on the case of Dubai Ports World Rwanda.

The general objective of this study was to assess the effect of transport management practices on organizational performance in Rwanda.

Specifically, the study was guided by the following objectives:

1. To assess the effect of transport scheduling on performance of Dubai Ports World Rwanda.
2. To find out the effect of transport route planning on performance of Dubai Ports World Rwanda.
3. To determine the effect of transport tracking on performance of Dubai Ports World Rwanda.

The following null hypotheses were proposed by the researcher:

H_{01}: There is no significant effect of transport scheduling on the performance of Dubai Ports World Rwanda.

H_{02}: There is no significant effect of transport route planning on the performance of Dubai Ports World Rwanda.

H_{03}: There is no significant effect of transport tracking on the performance of Dubai Ports World Rwanda.

2. Literature Review

2.1 Transport scheduling and organizational performance

Muhalia *et al.* (2021) studied the impact of TMS on FMCG supply chain efficiency in Kenya. A descriptive research approach was used in the study. The 51 FMCG producers based in Nairobi, each with its own operations manager, served as the unit of observation. Managers of operations at fast-moving consumer goods (FMCG) factories in Nairobi made up the sample frame for this investigation. A total of 51 FMCG firms in Nairobi were selected for the research using the census approach, making them the study's sample. The research relied on primary data. Surveys were used to gather information for research. When both descriptive and inferential statistics were used to the data, a mixed-methods approach was taken. SPSS version 23 software was used for the analysis of the field data. For the sake of expedited data input, the questionnaires were cited and their contents tagged. Tables were used to display the results. An analysis of FMCG supply chain performance in Kenya revealed that transportation management systems had a favorable and statistically significant effect. Transport management systems facilitate the following benefits, according to the study: trade compliance documentation and information; easier management and optimization of transportation operations (by land, air, or sea) for businesses; timely delivery of freight and goods; visibility into day-to-day transportation operations; and a more streamlined shipping process. Companies should automate their scheduling processes, according to the report. This would reduce the likelihood of delays caused by management interventions.

Koskei and Wanjala (2023) acknowledged the importance of logistics enterprises to Kenya's economic development and sought to understand how logistics tactics affected their performance. Despite its significance, the global economic environment is so competitive that many Kenyan logistics enterprises collapse within 5-10 years of formation owing to poor performance. To that end, researchers in Kenya set out to determine how logistics tactics including reverse logistics, cross docking, and order consolidation affect the competitiveness of logistics companies. Data was gathered from 98 workers chosen at random from among the top 100 logistics enterprises in Kenya using a descriptive survey research approach based on strategic diffusion theory. To get primary data, self-administered questionnaires were used and to gather secondary data, document schedules were used. Findings showed a good correlation between logistics methods and company success, with factors like blockchain technology and reverse logistics having a major impact on operational performance. Both academics and professionals in the industry may benefit from the new information that this study adds to our understanding of logistical advancements.

Hailu (2022) used the kombolcha textile share company as an example to examine logistical procedures and how they affect organizational performance. The research design of this study was cross-sectional and associational. The research aimed to achieve its aim by using a stratified sampling strategy to get an accurate sample size. As a research tool, questionnaires were used to obtain quantitative data for the study. One hundred twenty-eight company workers with some involvement in logistics (whether direct or indirect) provided the information. Version 20 of the Statistical Package for the Social Sciences was used to analyze the data. Each variable was described using descriptive statistics, and the link and impact between the independent and dependent variables were tested using inferential statistics. The findings showed that the organization has a strong grasp of logistical characteristics such as customer service, inventory management, supply chain management, transportation management, and warehouse management. Organizational performance is positively associated with and significantly affected by the main logistics practice factors in this study's data set. Therefore, in order to reap the benefits of the finest logistics system, KTSC needed to revise its approach to process management.

2.2 Transport route planning and organizational performance

Warkicho (2020) investigated how Bahir Dar Textile Share Company's operational performance was affected by different logistics management strategies. Logistics, warehousing, information flow, transportation, and inventory management were the main points. The study used both probability and non-probability sampling techniques to distribute 205 questionnaires and analyze 195 replies. It used a positivist paradigm with a deductive approach and an explanatory research design. The statistical study was carried out using STATA/SE 14 and SPSS Software version 26, which included Spearman's correlation and ordinal logistic regression. Findings showed a somewhat favorable correlation between information flow and operational performance, and a strong positive association between transportation management strategies and procurement. There were lower correlations between inventory management and warehousing, however. The research concludes that better logistics management strategies lead to better operational performance.

Adebayo and Aworemi (2021) looked at how transportation management strategies affected business outcomes in Nigeria's Lagos State. Ten food and beverage firms listed on the Nigerian Stock Exchange (NSE) were chosen using a purposive selection method. Factor analysis and multiple regression were used to examine the data that was acquired. With a p-value of 0.000, the factor analysis showed a KMO value of.546. When using Varimax to rotate the eight components, the total variance explained is 47.071%. As a result, Multiple Regression was performed using the 13 factor loadings as factor scores. A substantial influence of transport management techniques on the logistical performance of the selected enterprises was shown by the multiple regression findings ($R2 = 0.626$, $F-= 34.971$, $p =.000$). But with a p-value of just 0.000, only three of the components' coefficients were considered significant. The standardized coefficients for freight expenses (0.337), shipment tracking (0.196), and vehicle routing and scheduling (0.173) are as follows. According to the results, in order to boost performance even further, managers of the companies in the sample should embrace Logistics 4.0 and create a supply chain transportation plan that is responsive to service and cost needs.

Aflabo *et al.* (2020) examined the effect of fleet management strategies on competitive advantage in the transportation industry in the Kumasi metropolitan area in Ghana. We successfully obtained 178 replies, or 89% response rate, from a sample of 200 companies in the survey. Information was gathered by means of a survey. The researchers used a purposeful sampling approach to choose the participants. We used IBM Statistical Packages for Social Sciences, version 20, to examine the results of the explanatory research designs that we used. The data was analyzed using regression, correlation, and Cronbach's alpha coefficients. Vehicle monitoring was shown to have an unfavorable association with competitive advantage, in contrast to repair and maintenance, fuel and driver management, and training, all of which had positive effects. According to the research, businesses may gain a competitive advantage by consulting with fleet management specialists who can advise them on how to improve service delivery via the use of fleet management methods.

2.3 Transport tracking and organizational performance

Samita *et al.* (2020) looked at how transport management strategies affected procurement performance in the industrial sector. They specifically looked at Butali Sugar Company Limited in Kenya. It stressed the significance of warehousing as an integral part of production and the significance of procurement performance in sustaining competitiveness. The study examined workers who were directly engaged in making purchase decisions using a descriptive research approach. After conducting pilot research to verify reliability and validity, data was analyzed using SPSS version 24. Structured questionnaires were used for data collection. The results showed that transport management techniques had a major impact on procurement performance, which means that good transport management makes procurement more efficient and effective. Towards the conclusion of the study, the authors urged further investigation into this connection, especially from the public sector.

Muema and Achuora (2020) examined the effect of logistics management on supply chain performance for manufacturing enterprises in Kenya. The study opted for a descriptive study strategy. Each of the 708 Kenyan assembly enterprises that were certified in 2017 by the Kenya Association of Manufacturers served as the study's target population. Out of a total of 708 businesses, 96 were selected using an equation. The focal point of observation was the acquisition head of each company. The examination collected quantitative data that was crucial. Both informative and inferential metrics were used to examine the data in the study. To establish the relationship between the variables, a relapse model was used. Data analysis was carried out using SPSS version 21. Tables and figures were used to display the information that was found. According to the research, industrial companies in Kenya may improve their supply chain performance by using transportation management strategies. According to the research, in order to boost their visibility and competitiveness, assembly company management should include the techniques into their framework.

Adebayo (2022) looked studied how transportation management methods affected the success of businesses in Nigeria's Lagos State. Ten food and beverage firms listed on the Nigerian Stock Exchange (NSE) were chosen using a purposive selection method. Factor analysis and multiple regression were used to examine the data that was acquired. With a p-value of 0.000, the factor analysis showed a KMO value of.546. When using Varimax to rotate the eight components, the total variance explained is 47.071%. As a result, Multiple Regression was performed using the 13 factor loadings as factor scores. A substantial influence of transport management techniques on the logistical performance of the selected enterprises was shown by the multiple regression findings (R 2 = 0.626, F-= 34.971, p =.000). But with a p-value of just 0.000, only three of the components' coefficients were considered significant. The standardized coefficients for freight expenses (0.337), shipment tracking (0.196), and vehicle routing and scheduling (0.173) are as follows. According to the results, in order to boost performance even further, managers of the companies in the sample should embrace Logistics 4.0 and create a supply chain transportation plan that is responsive to service and cost needs.

3. Methodology

In this section, the methodology for conducting research to achieve the stated objectives was outlined. It underscores the significance of acquiring and utilizing accurate information effectively to attain research goals. Essentially, research methodology encompasses the systematic procedures followed to obtain necessary information and analyze it logically.

3.1 Research Design

This study adopted a descriptive and correlational research design. The descriptive aspect intends to portray the quality of transport management practices and their impact on organizational performance through descriptive statistics. The correlational aspect aims to evaluate the relationship between transport management and organizational performance.

3.2 Study population

The study population comprises individuals directly involved in transport management practices at DP World Rwanda. The population of this study was 329 people including administrative staff, Procurement and Logistics Officers, warehouse management, Finance & Accounting departments of DP World Rwanda.

3.3 Sample size and sampling

Slovin's formula enabled researchers to sample the community with the appropriate degree of precision, while studying the complete population is impossible owing to lack of resources and time. Using Slovin's formula, researchers estimate how big a sample needed to get reliable findings.
This is how you determine which version of Slovin's equation to use:

$$n = \frac{N}{1 + (Ne^2)}$$

n= Number of samples or sample size
N= Total population
e = Error tolerance

$n = \frac{329}{1+(329x0.05^2)} = \frac{329}{1+(329x0.0025)} = \frac{329}{1+0.8225} = \frac{329}{1.8225} = 180.52 \cong 181$

3.4 Data Collection Methods

There were closed-ended forms of inquiry. The purpose of the free-form queries was to elicit feedback from the participants. 181 employees at DP World Rwanda under its control were sent questionnaires with closed-ended inquiries for this research. Viewing documents from both public and unpublished sources enriched the study. Annual and efficiency reports were analyzed from the DP World Rwanda for this research.

3.5 Data analysis

The data were analyzed using a combination of descriptive statistics, inferential statistics (Bivariate Correlation analysis), and a linear regression model. Here, the researcher used SPSS (Statistical Package for Social Scientists, version 25.0) to make sense of things like frequency, percentage, mean, and standard deviation.

Bivariate Correlation analysis was used for testing the validity of hypotheses, this ensures test of one dependent variable to one independent variable. It is one of the simplest forms of statistical analysis, which was used to find out if there is a relationship between two sets of values. It usually involves the variables X and Y. Bivariate analysis is the analysis of exactly two variables.
Linear regression model was evaluated to all indicators as stated in the conceptual framework.
The coefficient measured effect size using the following regression equation:

$Y= \beta_0+ \beta_1X1+ \beta_2X_2+ \beta_3X_3+e$:
Where: Y= Organization Performance,
β_0= Constant
X_1= Transport Scheduling
X_2= Transport Rout Planning
X_3= Transport Tracking

3.6 Ethical Considerations

Ethical integrity was a fundamental principle guiding all stages of this research, particularly during data collection. The researcher demonstrated professionalism, expertise, and a sincere commitment to upholding the dignity and rights of all participants. Key ethical principles including autonomy, confidentiality, anonymity, and informed consent were strictly adhered to throughout the study. Data was collected and managed in a manner that guaranteed the privacy and anonymity of all individuals, thereby maintaining the highest standards of ethical research conduct.

4. Results and Discussion

This chapter entails the findings of the study based on the data collected from the field. The analysis focused on the objective of the study to evaluate the effect of transport management practices on organizational performance at Dubai Ports World Rwanda.

4.1 Response Rate

As a proportion of the total number of people who were given the survey or questionnaire, the response rate measures how many people actually filled it out and sent it back.

Table 1: Response rate

Questioners	Frequency	Percentage
Returned	166	91.71
Unreturned	15	8.29
Total	181	100.0

Source: Primary data, 2024

Table 1 presents the response rate of the questionnaires from the study assessing the effect of transport management practices on organizational performance at Dubai Ports World Rwanda. Out of 181 questionnaires distributed, 166 were returned, constituting a response rate of 91.71%, while 15 questionnaires were not returned due to temporary absence of selected individuals during the data collection phase, accounting for 8.29%. According to Eisele *et al*., (2022), a response of 70% and above is adequate, hence high response rate of 91.71% reflects strong participation and interest from the respondents, which enhances the reliability and validity of the study's findings regarding the effects of transport scheduling, transport route planning, and transport tracking on the performance of Dubai Ports World Rwanda.

4.2 Correlation analysis

Correlation analysis is used as a statistical method which evaluate the strength and direction of the relationship between two quantitative variables. It helped to determine if, and how strongly, pairs of variables are related. If ($p < 0.05$), the correlation is considered statistically significant

Table 2: Correlations

		Transport Scheduling	Transport Route Planning	Transport Tracking	Organizational performance
Transport Scheduling	Pearson Correlation	1	.707**	.644**	.784**
	Sig. (2-tailed)		.000	.000	.000
	N	166	166	166	166
Transport Route Planning	Pearson Correlation	.707**	1	.776**	.779**
	Sig. (2-tailed)	.000		.000	.000
	N	166	166	166	166
Transport Tracking	Pearson Correlation	.644**	.776**	1	.719**
	Sig. (2-tailed)	.000	.000		.000
	N	166	166	166	166
Organizational performance	Pearson Correlation	.784**	.779**	.719**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	166	166	166	166

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data, 2024

Table 2 presents the correlation coefficients between transport scheduling, transport route planning, transport tracking, and organizational performance at Dubai Ports World Rwanda. The findings show a strong positive correlation between transport scheduling and organizational performance ($r = 0.784$, $p < 0.05$), indicating that scheduling is associated with enhanced performance at Dubai Ports World Rwanda. Additionally, there is a significant positive correlation between transport route planning and organizational performance ($r = 0.779$, $p < 0.05$), indicating that route planning contributes positively to performance of Dubai Ports World Rwanda. Furthermore, transport tracking also shows a strong positive correlation with organizational performance ($r = 0.719$, $p < 0.05$), indicating the tracking associated with performance of Dubai Ports World Rwanda. The significance of all correlations (Sig. = 0.000<0.05) further supports the reliability of these findings.

These findings align with Muhalia *et al.* (2021), who emphasize the importance of effective transportation management in logistics. Just as efficient logistics enhance overall effectiveness in response to customer demands, so too do optimized transport practices contribute positively to operational performance at Dubai Ports World Rwanda.

4.3 Regression

Regression analysis helped to understand how the typical value of dependent variable (outcome) changes when any one of the independent variables (predictors).

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854[a]	.729	.724	.35260

a. Predictors: (Constant), Transport Tracking, Transport Scheduling, Transport Route Planning

Source: Primary data, 2024

Table 3 presents the model summary for the regression analysis conducted on the effect of transport tracking, transport scheduling, and transport route planning on organizational performance at Dubai Ports World Rwanda.

The correlation coefficient ($R = 0.854$) indicates a strong positive relationship between the predictors and organizational performance. The R^2 of 0.729 indicates that approximately 72.9% of the variance in organizational performance is explained by the combination of transport tracking, transport scheduling, and transport route planning, demonstrating a high level of explanatory power. The adjusted R^2 of 0.724 accounts for the number of predictors in the model, indicating that the model still provides substantial explanatory capacity after adjusting for the degrees of freedom. Overall, these results indicate that the model effectively captures the influence of transport management practices on organizational performance at Dubai Ports World Rwanda.

The findings are consistent with Monstadt and Schmidt (2019) that emphasize the importance of efficient transport management practices in enhancing overall organizational performance. Their research highlights how robust infrastructure, meticulous route planning, and load optimization in the German transportation sector led to significant cost reductions and improved delivery efficiencies. Similarly, the positive effects of transport tracking, scheduling, and route planning at Dubai Ports World Rwanda demonstrate that systematic

approaches in logistics management are crucial for achieving operational excellence. This consistency across different contexts reinforces the notion that effective transport systems are vital for maximizing efficiency and delivering superior performance outcomes in various industries.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.182	3	18.061	145.654	.000[b]
	Residual	20.141	162	.124		
	Total	74.323	165			

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), Transport Tracking, Transport Scheduling, Transport Route Planning

Source: Primary data, 2024

Table 4 presents the Analysis of Variance (ANOVA) results for the regression model assessing the impact of transport tracking, transport scheduling, and transport route planning on organizational performance at Dubai Ports World Rwanda.

The F-value of 145.654 indicates that the model is statistically significant in predicting organizational performance, as supported by the significance value (Sig.) of 0.000. This p-value is well below the standard alpha level of 0.05, thus confirming that the predictors transport tracking, transport scheduling, and transport route planning have a significant joint effect on organizational performance at Dubai Ports World Rwanda.

The findings align well with Iradukunda (2021), who emphasizes that Rwanda's impressive economic growth is closely tied to the establishment of efficient and reliable transportation systems. The statistical significance of the model in predicting organizational performance at Dubai Ports World Rwanda indicates the critical role transport tracking, scheduling, and route planning play in enhancing operational effectiveness. Rwanda's initiatives to promote sustainable transport solutions, such as electric vehicles and cycling infrastructure, further reflect the importance of improving logistics efficiency. This synergy between effective transport management practices and national development goals emphasizes the need for strategic transport initiatives to drive economic growth and minimize environmental impact.

Table 5: Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.296	.158		1.873	.063
	Transport Scheduling	.429	.059	.430	7.272	.000
	Transport Route Planning	.335	.073	.331	4.590	.000
	Transport Tracking	.187	.067	.186	2.792	.006

a. Dependent Variable: Organizational performance

Source: Primary data, 2024

In Table 5, the constant term is reported as .296. This constant represents the estimated value of organizational performance when all predictor variables (transport scheduling, transport route planning, and transport tracking) are equal to zero.

The unstandardized coefficient for Transport Scheduling is 0.429, indicating that for each one-unit increase in transport scheduling, organizational performance is expected to increase by 0.429, assuming that all other variables remain constant. The significance level for this coefficient (Sig. = 0.000) illustrates that this relationship is highly statistically significant, indicating a strong effect of transport scheduling on organizational performance. For Transport Route Planning, the unstandardized coefficient is 0.335, which means that for every one-unit increase in transport route planning, organizational performance is expected to increase by 0.335, with all other factors held constant. The significance of this coefficient is also 0.000, denoting a highly statistically significant positive relationship with organizational performance. Finally, the unstandardized coefficient for Transport Tracking is 0.187. This indicates that an increase of one unit in transport tracking is associated with an increase of 0.187 in organizational performance, assuming all other variables are constant. The significance value for this coefficient (Sig. = 0.006) indicates a statistically significant relationship, albeit weaker than the other two predictors.

Therefore, the coefficients for transport scheduling, Transport Tracking and transport route planning are highly significant, indicating that the effect of transport management practices is crucial for enhancing organizational performance.

The findings are supported by the emphasis of Muhire (2022) that effective transportation management is essential for businesses, particularly in Rwanda’s fast-moving consumer goods sector, where transportation plays a critical role in shipping products both nationally

and internationally. Researcher highlights that as operational costs within the supply chain can be significant, achieving efficiency in transporting raw materials, work-in-progress, and finished goods is vital. The significant coefficients for transport scheduling, route planning, and tracking at Dubai Ports World Rwanda reinforce the assertion that optimizing these practices leads to improved organizational performance, responsiveness, and competitive advantage in a rapidly evolving market.

Table 5 summarizes the results of the hypothesis tests examining the effects of transport scheduling, transport route planning, and transport tracking on the performance of Dubai Ports World Rwanda. All three null hypotheses (H_{01}, H_{02}, and H_{03}) are stated as there being no significant effect of the respective transport management practices on performance of Dubai Ports World Rwanda. Given the reported P values of $p < 0.05$ for all hypotheses, the corresponding comments indicate that each null hypothesis is rejected. This means there is sufficient statistical evidence to conclude that each of the transport management practices scheduling, route planning, and tracking has a significant effect on the performance of Dubai Ports World Rwanda. The rejection of these null hypotheses reinforces the importance of these transport management practices in enhancing organizational performance.

5. Conclusion and Recommendations

5.1 Conclusion

The general objective of the study was to determine the impact of transport management practices on organizational performance at Dubai Ports World Rwanda. Specific objectives included assessing the effect of transport scheduling, transport route planning, and transport tracking on organizational performance. The descriptive findings showed a generally positive agreement among respondents regarding the influence of these transport management practices on performance outcomes at Dubai Ports World Rwanda.

The rejection of all hypotheses (H_{01}, H_{02}, H_{03}) at a significance level of $\rho<0.05$ indicates significant effects of transport scheduling, route planning, and tracking on organizational performance. This indicates that these transportation management components play crucial roles in enhancing and improving overall operational effectiveness. The findings of correlation and regression analysis underscore the significant effect of transport scheduling, transport route planning, and transport tracking on performance of Dubai Ports World Rwanda.

5.2 Recommendations

Recommendations are drawn in line with the set objectives of the study as follows:

1. It is recommended that Dubai Ports World Rwanda conduct regular training sessions for staff involved in transport scheduling to enhance their skills in utilizing scheduling tools and understanding logistics best practices.
2. Dubai Ports World Rwanda should gather and analyze feedback regularly from staff and clients regarding scheduling effectiveness.
3. It is recommended that Dubai Ports World Rwanda evaluate and adjust transport routes regularly, based on performance metrics and changing conditions.
4. Dubai Ports World Rwanda should develop a customer communication system to keep clients informed about their shipment status through timely alerts and notifications.

5.3 Areas for Further Research

Future studies are suggested to focus on the impact of advanced technology adoption on transport management efficiency in Dubai Ports World Rwanda, the role of human resource training and development in enhancing transport management practices in Dubai Ports World Rwanda, the effect of policy and regulatory frameworks on the effectiveness of transport management strategies in Dubai Ports World Rwanda, and the impact of customer satisfaction on the success of transport management practices in Dubai Ports World Rwanda.

References

Adebayo, I. T., & Aworemi, J. R. (2021). Transport Management Practices and Firms' Performance in Nigeria. In Proceedings of the International Conference on Industrial Engineering and Operations Management (pp. 1-5). Rome, Italy: IEOM Society International.

Aflabo, J. E., Kraa, J. J., & Agbenyo, L. (2020). Examining the effect of fleet management on competitive advantage in the transport industry. *European Journal of Logistics, Purchasing and Supply Chain Management, 8*(2), 7-23.

Dukuly, B. A. (2023). Effects of Warehousing Management on Organisational Performance: Case of Africa Global Logistics Rwanda Ltd. *International Journal of Innovative Science and Research Technology*, *8*(10), 724.

Eisele, G., Vachon, H., Lafit, G., Kuppens, P., Houben, M., Myin-Germeys, I., & Viechtbauer, W. (2022). The effects of sampling frequency and questionnaire length on perceived burden, compliance, and careless responding in experience sampling data in a student population. *Assessment*, *29*(2), 136-151.

Hailu, A. (2022). The effect of logistics practice on organizational performance: In case of Kombolcha textile share company. *Journal of Management Info*, 8, 280-303.

Iradukunda, I. (2021). Urban transport and climate change mitigation options to minimize Greenhouse Gas emissions and to promote sustainable use of public transport in Kigali, Rwanda.

Kabale, T., Irechukwu, E. N., & Ogoi, H. J. (2019). Effect of Logistics Management Practices on Operational Performance of Humanitarian Organizations: Case study: World Food Programme (WFP), Rwanda. *International Journal of Research in Management, Economics and Commerce*, *9*(6), 41-49.

Koh, L., Dolgui, A., & Sarkis, J. (2020). Blockchain in transport and logistics–paradigms and transitions. *International Journal of Production Research*, *58*(7), 2054-2062.

Monstadt, J., & Schmidt, M. (2019). Urban resilience in the making? The governance of critical infrastructures in German cities. *Urban Studies*, *56*(11), 2353-2371.

Muhalia, E., Ngugi, P., & Moronge, M. (2021). Effect Of Transportation Management Systems On Supply Chain Performance of Fmcg In Kenya. *American Journal of Supply Chain Management, 6*(1), 1-12.

Muhire, A. (2022). Role of logistics management on the operational performance of organizations in Rwanda. *Global Scientific Journal, 10*(11)

Nema, M. L., Mahaman, B. S., Diedhiou, A., & Mugabe, A. (2023). Local perception and adaptation strategies to landslide occurrence in the Kivu catchment of Rwanda. *Natural Hazards and Earth System Sciences*, *10*(3), 215-230.

Nzeyimana, D. (2021). Effect of logistics on supply chain performance in private pharmaceutical sector in Rwanda: Case of pharmaceutical wholesales-Nyarugenge District. *The International Journal of Business Management and Technology, 5*(6).

Othman, M. K., Sanusi, I. A., Arof, A. M., & Ismail, A. (2019). Evaluation of delay factors on dry bulk cargo operation in Malaysia: a case study of kemaman port. *The Asian Journal of Shipping and Logistics*, *35*(3), 127-137.

Samita, M. N., Kadima, J., & Juma, D. (2020). Influence of transport management practices on procurement performance of manufacturing firms in Kenya: A case study of Butali Sugar Company Limited. *Strategic Journals, 7*(4), 1075-1085.

Warkicho, K. (2020). Effect of Logistics Management Practice on Operational Performance:(In Case of Bahir Dar Textile Share Company) (Doctoral dissertation).